1145-VF-1191 Elaine Terry* (terry@sju.edu), 5600 City Avenue, Philadelphia, PA 19131. Using Graph Theory to Model Connectivity in the Human Brain. Preliminary report.

The brain is often described as the most complex organ that humans possess. Most research involving the brain focuses on analyzing the makeup and responsibilities of the six anatomical regions that comprise the brain. However the billions of nerve cells and connections together make it possible to view the brain as a graph. The research effort to construct complete connectivity in the human brain, called the Human Connectome Project, makes use of concepts in graph theory to model and quantify connectivity in the brain. In this presentation I will briefly summarize concepts in graph theory that are used to quantify the properties of brain networks. (Received September 19, 2018)